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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,899	08/13/2001	Seungup Paek	A32095-PCTUS	5340
21003	7590	04/13/2006	EXAMINER	
BAKER & BOTTS 30 ROCKEFELLER PLAZA NEW YORK, NY 10112			LEROUX, ETIENNE PIERRE	
		ART UNIT		PAPER NUMBER
		2161		
DATE MAILED: 04/13/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/830,899	PAEK ET AL.	
	Examiner Etienne P LeRoux	Art Unit 2161	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 03 March 2006.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-43 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 13 August 2001 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

Prosecution Reopened

In view of the Appeal Brief filed on March 3, 2006, PROSECUTION IS HEREBY REOPENED.

New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:



**CHARLES RONES
SUPERVISORY PATENT EXAMINER**

Claim Status

Claims 1-43 are pending. Claims 1-43 are rejected as detailed below.

Priority

The later-filed application must be an application for a patent for an invention which is also disclosed in the prior application (the parent or original nonprovisional application or provisional application). The

disclosure of the invention in the parent application and in the later-filed application must be sufficient to comply with the requirements of the first paragraph of 35 U.S.C. 112. See *Transco Products, Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994).

The disclosure of the prior-filed application, Application No. 60/107,463, filed November 6, 1998 fails to provide adequate support or enablement in the manner provided by the first paragraph of 35 U.S.C. 112 for one or more claims of this application. In Appeal Brief, filed March 3, 2006, Appellant stated that Figures 7 and 8 and Page 26 provide support for claim 1. Figures 5 and 6 and page 26 were included under Rule 26 as of the international filing date, i.e., November 5, 1999. The disclosure in provisional application 60/107,463, filed November 6, 1998 is not sufficient comply with the requirements of the first paragraph of 35 U.S.C. 112 regarding the claimed invention as filed August 13, 2001.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-43 are rejected under 35 U.S.C. 102(b) as being anticipate by US Pat No 6,079 issued to Eleftheriadis et al (hereafter Pat '566).

Claims 1, 17 and 33:

Pat '566 discloses:

- (a) at least one multimedia information input interface receiving said multimedia information [MPEG-4 file, Fig 4, electronic memory 390, col 7, line 25]
- (b) a computer processor coupled to said at least one multimedia information input interface receiving said multimedia information therefrom [Fig 4, CPU 380], processing said multimedia information by performing object extraction processing to generate multimedia object descriptions from said multimedia information [read operation module 290 accesses object table 370 for translation purposes and communicates extracted audiovisual data to MPEG-4 player 360, col 7, lines 35-40] processing said generated multimedia object descriptions by object hierarchy processing to generate multimedia object hierarchy descriptions indicative of an organization of said object descriptions [col 3, lines 35-40, tree-structured approach] wherein at least one description record including said multimedia object descriptions and said multimedia object hierarchy descriptions is generated for content embedded within said multimedia information [Fig 4]
- (c) a data storage system, operatively coupled to said processor for storing at least said at least one description record [Fig 4, MPEG-4 player 360, video buffer col 7, lines 40-42]

Claims 2, 18 and 34:

Pat '566 discloses wherein said multimedia information comprises image information, said multimedia object descriptions comprise image object descriptions, and said multimedia object hierarchy descriptions comprise image object hierarchy descriptions. [col 3, lines 35-40, tree-structured approach]

Claims 3 and 19:

Pat '566 discloses (a) image segmentation processing to segment each image in said image information into regions within said image, and (b) feature extraction processing to generate one or more feature

descriptions for one or more of said regions, whereby said generated object descriptions comprise said one or more feature descriptions for one or more of said regions [col 3, lines 20-28]

Claims 4, 20 and 35:

Pat '566 discloses wherein said one or more feature descriptions are selected from the group consisting of text annotations, color, texture, shape size and position [col 30-40]

Claims 5, 21 and 36:

Pat '566 discloses wherein said object hierarchy processing comprises physical object hierarchy organization to generate physical object hierarchy descriptions of said image object descriptions that are based on spatial characteristics of said objects, such that said image object hierarchy descriptions comprise physical descriptions [col 30-40].

Claims 6, 22 and 37:

Pat '566 discloses wherein said object hierarchy processing further comprises logical object hierarchy organization to generate logical object hierarchy descriptions of said image object descriptions that are based on semantic characteristics of said objects, such that said image object hierarchy descriptions comprise physical and logical descriptions [col 2, lines 5-10]

Claims 7 and 23:

Pat '566 discloses image segmentation processing to segment each image in said image information into regions within said image and (b) feature extraction processing to generate object descriptions for one or more of said region, and wherein said physical hierarchy organization and said logical hierarchy generate hierarchy descriptions of said object descriptions for said one or more of said regions [col 2, lines 5-10]

Claims 8 and 24:

Pat '566 discloses further comprising an encoder receiving said image object hierarchy descriptions and said image object descriptions, and encoding said image object hierarchy descriptions and said

image object descriptions into encoded descriptions information, wherein said data storage system is operative to store said encoded description information as said at least one description record [Fig 4, 390]

Claims 9, 25 and 38:

Pat '566 discloses wherein said multimedia information comprises video information, said multimedia object descriptions comprise video object descriptions including both event descriptions and object descriptions, and said multimedia hierarchy descriptions comprise video object hierarchy descriptions including both event hierarchy descriptions and object hierarchy descriptions [col 1, lines 30-40]

Claims 10 and 26:

Pat '566 discloses (a) temporal video segmentation processing to temporally segment said video information into one or more video events or groups of video events and generate event descriptions for said video events, (b) video object extraction processing to segment said one or more video events or groups of video events into one or more regions, and to generate object descriptions for said regions; and (c) feature extraction processing to generate one or more event feature descriptions for said one or more video events or groups of video events, and one or more object feature descriptions for said one or more regions; wherein said generated video object descriptions include said event feature descriptions and said object descriptions [col 3, lines 30-40]

Claims 11, 27 and 39:

Pat '566 discloses wherein said one or more event feature descriptions are selected from the group consisting of text annotations, shot transition, camera motion, time and key frame, and wherein said one or more object feature descriptions are selected from the group consisting of color, texture, shape, size, position, motion, and time [col 3, lines 27, 28, col 3, lines 30-35]

Claims 12, 28 and 40:

Pat '566 discloses wherein said object hierarchy processing comprises physical event hierarchy organization to generate physical event hierarchy descriptions of said video object descriptions that are based on temporal characteristics of said video objects, such that said video hierarchy descriptions comprise temporal descriptions [col 3, lines 15-45]

Claims 13, 29, 41 and 43:

Pat '566 discloses wherein said object hierarchy processing further comprises logical event hierarchy organization to generate logical event hierarchy descriptions of said video object descriptions that are based on semantic characteristics of said video objects, such that said hierarchy descriptions comprise both temporal and logical descriptions [col 4, lines 1-15]

Claims 14, 30 and 42:

Pat '566 discloses wherein said object hierarchy processing further comprises physical and logical object hierarchy extraction processing, receiving said temporal and logical descriptions and generating object hierarchy descriptions for video objects embedded within said video information, such that said video hierarchy descriptions comprise temporal and logical event and object descriptions [col 3, line 15 through col 4, line 15]

Claims 15 and 31:

Pat '566 discloses (a) temporal video segmentation processing to temporally segment said video information into one or more video events or groups of video events and generate event descriptions for said video events, (b) video object extraction processing to segment said one or more video events or groups of video events into one or more regions, and to generate object descriptions for said regions', and (c) feature extraction processing to generate one or more event feature descriptions for said one or more video events or groups of video events, and one or more object feature descriptions for said one or more regions; wherein said generated video object descriptions include said event feature descriptions and said object descriptions, and wherein said physical event hierarchy

organization and said logical event hierarchy organization generate hierarchy descriptions from said event feature descriptions, and wherein said physical object hierarchy organization and said logical object hierarchy organization generate hierarchy descriptions from said object feature descriptions [col 3, line 15 through col 4, line 15]

Claims 16 and 32:

Pat '566 discloses an encoder receiving said video object hierarchy descriptions and said video object descriptions, and encoding said video object hierarchy descriptions and said video object descriptions into encoded description information, wherein said data storage system is operative to store said encoded description information as said at least one description record [col 3, line 15 through col 4, line 15]

Response to Arguments

Applicant's arguments filed in Appeal Brief of 3/3/2006, have been fully considered and are partially persuasive. Applicant's arguments are now moot based on above new art rejection. For purposes of clarity of the record, certain arguments made by Appellant are considered below.

Appellant Argues:

Appellant in pages 8 and 9 argues that instant invention pertains to the MPEG-7 standard while Rajan's disclosure is with reference to MPEG-4.

Examiner Responds:

Examiner is not persuaded. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., MPEG-7) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Appellant Argues:

Appellant states in the paragraph joining pages 9 and 10:

Rajan does not disclose or suggest at least the claimed “performing object extraction processing to generate multimedia object descriptions.” Indeed, the lack of such disclosure in Rajan is not surprising since although “object extraction processing to generate multimedia object descriptions” is a key step in the present invention (in order to extract information from a multimedia signal, such as a picture or video, to describe the content of the picture or video), it is entirely unnecessary for the purposes of MPEP-4 and Rajan (which are directed to multimedia composition and presentation, and not extraction).

Examiner Responds:

Examiner is not persuaded. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., unnecessary for the purposes of MPEG-4) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993)

Appellant in Summary of the Invention in the Appeal Brief filed March 3, 2006 points to Figure 7 of the drawings and to paragraph 3 of page 26 of the specification which states:

In a preferred method, object extraction 720 consists of two subsidiary operations, namely image segmentation 725 and feature extraction and annotation 726. For the image segmentation 725 step, any (emphasis added) region tracking technique which partitions digital images into regions that share one or more common characteristics may be employed. Likewise, for the feature extraction and annotation step 326, any (emphasis added) technique which generates features from segmented regions may be employed.

The specification states that any region tracking technique and any technique that generates features from segmented regions may be employed to perform object extraction. Examiner concludes that the specification is stating that “performing object extraction processing to generate multimedia object descriptions” would have been obvious to one of ordinary skill in the art because no particular process is described for performing object extraction. Because no particular process for object extraction is described, applicant is admitting that “performing object extraction processing to generate multimedia object descriptions” is well-known and expected in the art and is thus admitted prior art.

Appellant Argues:

Appellant states in the paragraph joining pages 16 and 17:

Additionally, though it apparently did not form the basis for any rejections, the Examiner relies on a 1999 MPEG-4 publication as alleged evidence of the state of the art at the time the present application was filed. (See Final Office Action, p. 9). However, the present application claims priority to November 6, 1998. For this reason at least, the cited reference is not a valid indicator of the state of the art at the time of the present invention. Additionally, as explained in detail above, the cited reference refers to the MPEG-4 technology, which is distinct from, and unrelated to, the claimed invention.

Examiner Responds:

Examiner is not persuaded. Examiner has repeatedly pointed out in the above Response(s) by Examiner that limitations from the specification cannot be read into the claims because examiner during the examination process, must give claims their broadest reasonable interpretation. Furthermore, as pointed out in above Office action, deficiencies in Appellant’s provisional application filed November 6, 1998, obviates the priority date of provisional application filed November 6, 1998.

Furthermore, examiner provides additional support¹ for the fact that MPEG-4 includes object descriptors. In fact, the MPEG-4 and MPEG-4 share common object descriptors.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Etienne P. LeRoux whose telephone number is (571) 272-4022. The examiner can normally be reached Monday through Friday between 8:00 am and 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin, can be reached on (571) 272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Etienne LeRoux

April 10, 2006

¹ Pub No US 2005/0076055, Mory et al, paragraph 39